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ABSTRACT

A study investigated the applicability of the theory of tentative developmental stages in English-as-a-Second-Language (ESL) development (TDS), which posits specific sequences for specific language features and hypothesizes developmental stages that cut across those sequences. The six stages are defined by specified combinations of three speech processing strategies. The case study involved a native Korean-speaking student enrolled in an intermediate-level ESL course at an American college. Data were drawn from nine transcripts of the subject involved in information-gap tasks with different native-English-speaking and non-native English-speaking interlocutors. Independent clauses were analyzed and grammatical features used were identified according to developmental stage. It was found that while the subject's speech contained features from each of the six stages, 96 percent of stage 1-3 features were present but only 41 percent of stage 4-6 features were found. Because the theory proposes that the developmental stages are "implicational" (i.e., that features from all previous stages have been acquired), the findings do not support the theory. Contains 16 references. (MSE)

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A Test of Pienemann and Johnston's Tentative Developmental Stages in ESL Development

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The first problem for SLA theory is that few 'well-accepted', empirical findings exist. For most propositions about the influence of some factor on SLA and evidence for those propositions, there are corresponding counter-propositions and corresponding counter-evidence.

The second problematic situation for SLA theory is that, even though there are some 'well-accepted' findings, each new finding seems to add more to a 'realization' of the complexity of SLA rather than an 'understanding' and therefore an explanation of it.

An example of this paradoxical situation is created by the co-existence of empirical evidence of common developmental sequences and stages (DS/S) together with evidence of several types of variation within and among learner's interlanguage [i.e., 'interlanguage variation' (ILV)]. DS/S suggest that SLA is very much the product of innate factors. ILV suggests just the opposite. In other words, the big problem for adult SLA theory is the age-old debate of nature versus nurture.

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Several theories approach this problem by claiming that either DS/S or ILV is irrelevant for SLA theory. For example, the Variable Competence Model claims that DS/S are irrelevant (Ellis, 1985, 1990, 1994). The Universal Grammar Model claims that ILV is irrelevant

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(Gregg, 1990). What we are left with is a theory of ILV and a theory of grammatical competence not theories of SLA.

I believe that neither DS/S nor ILV can be dismissed. An SLA theory must deal directly with both of these phenomena. What theories do this? There are very few.

An explanation of both DS/S and ILV is definitely at the center of the Monitor Model. However, this paper is an examination of another theory that attempts to account for both DS/S and ILV and is falsifiable--the Multidimensional Model (MDM).

The MDM arose from studies of the acquisition of German-as-a-second-language (GSL), word-order rules. These studies claim to have discovered DS/S. The MDM accounts for DS/S and ILV by stating that some features of a language are 'developmental' while other features are 'variational'. 'Developmental' features can only be learned/acquired in accord with DS/S which are not influenced by L1, instruction, context, or any other factor. 'Variational' features can be learned/acquired at any point in the learner's development. Furthermore, the theory says that there are a set of specific 'speech processing strategies' that explain and can predict DS/S in any language (Clahsen, 1984; Larsen-Freeman & Long, 1991; Meisel, Clahsen, & Pienemann, 1981; Pienemann, 1984, 1989; Pienemann & Johnston, 1987; Pienemann, Johnston, & Brindley, 1989).

Tentative Developmental Stages in ESL Development

The application of the MDM to English is the work of Pienemann and Johnston (1987: p. 82-83) who have posited the "Tentative Developmental Stages in ESL Development" (TDS).

The TDS hypothesis was first presented as a table that appears here as Table 1. The TDS posits specific implicational sequences and stages of 'developmental' features. Evidence of interest in this hypothesis can be found in the fact that Pienemann and Johnston's table was re-published in-full in Larsen-Freeman and Long (1991) and in-part in Lightbown and Spada (1993).

Pienemann and Johnston's hypothesized DS/S are interesting for two reasons. First, Pienemann and Johnston posit not only specific sequences for specific language features but also hypothesize developmental stages that cut across the specific sequences of specific language features. The six stages are defined by specific combinations of three speech processing strategies. Second, the hypothesized DS/S for English is an attempt at top-down theory formation. Pienemann and Johnston's TDS did not arise from empirical evidence of DS/S in English SLA. The TDS was generated by analyzing morpho-syntactic features of English with respect to the MDM's speech processing strategies. Again, the MDM arose from the attempt to explain the findings from studies of GSL acquisition.

Table 1: Tentative Developmental Stages in ESL Development (Pienemann & Johnston, 1987)

STAGE	VERB	NOUN	PRONOUN	QUEST
1:		'WORDS' or 'FORMULAE'		
2:	IL-ing IRREG		1st 2nd 3rd	SVO?
3:	-ed	REG_PL IRREG_PL	POSSESS	DO_FRONT WHX_FRONT
4:	AUX_EN AUX_ING	POSSESS		PSEUDO_INV Y/N_INV_
5:	3SG_S	PL_COND	CASE 3rd RFLX ADV	AUX_2ND SUPPLET
6:	GERUND		RFLX PN	Q_TAG

STAGE	NEG	AD	ADJ	PREP	W_ORDER
1:		'WORDS' or 'FORMULAE'			
2:	no no + X			PP	SVO
3:	don't + V	ADV	more		TOPIC ADV_FRONT
4:			better best	COMP_TO	PART_MOV PREP_STRD
5:	DO_2ND SUPPLET	-ly	-er -est		DAT_TO
6:					ADV VP DAT_MVMT CAUSATIVE 2SUBCOMP

KEY (Table 1):

IL-ing= non-standard 'ing'
PP= prepositional phrase
DO_FRONT= yes/no question with initial 'do'
WHX_FRONT= fronting of wh-word and possible cliticized element (e.g. 'what do')
TOPIC= topicalization of initial or final elements
ADV_FRONT=fronting of final adverbs or adverbial PPs
AUX_EN= [be/have] + V-ed, not necessarily with standard semantics
PSEUDO_INV= simple fronting of wh-word across verb (e.g. where is the summer)
COMP_TO=insertion of 'to' as a complementizer as in 'want to go'
PART_MOV=verb-particle separation, as in 'turn the light on'
AUX_ING=[be]+V-ing, not necessarily with standard semantics
Y/N INV= yes/no questions with subject-verb/aux inversion
PREP_STRD=stranding of prepositions in relative clauses
3SG_S=third person singular '-s' marking
PL_CONCD=plural marking of NP after number or quantifier (e.g. 'many factories')
CASE(3rd)= case marking of third person singular pronouns
AUX_2ND=placement of 'do' or 'have' or 'can' in second position
DO_2ND=as above, in negation
SUPPLET=suppletion of 'some' into 'any' in the scope of negation
DAT_TO=indirect object marking with 'to'
RFLX(ADV)=adverbial or emphatic usages of reflexive pronouns
RFLX(PN)=true reflexivization
Q_TAG= tag questions
DAT_MVMT=dative movement(e.g. 'I gave John a gift').
CAUSATIVE=structures with 'make' and 'let', etc.
2SUBCOMP= different subject complements with verbs like 'want'

THE STUDY

Subjects

The subject of this study was a 24-year-old, male, native-speaker of Korean. At the time the data was collected (1992), the subject was a student at the American Language Academy at Southern Oregon State College where he was enrolled in an intermediate level listening and speaking class.

Purpose

The purpose of this study was to seek evidence supporting Pienemann and Johnston's (1987: p. 82-83) "Tentative Developmental Stages in ESL Development" (TDS) in the speech of an intermediate level ESL learner.

Materials

This study examined transcripts of the subject involved in information gap tasks with various NS and NNS interlocutors. The subject's conversations were recorded by Morgan (1992) as part of his MA:TESOL thesis. The transcripts used in this study were prepared from Morgan's audio tapes by students as part of an assignment for an ESL-teacher-training course at Portland State University.

Procedure

Table 1 shows Pienemann and Johnston's 'Tentative Developmental Stages in ESL Development'. It contains 52 morpho-syntactic features arranged vertically by developmental 'stage' and also horizontally by language 'structure'.

Nine transcripts were analyzed. In each transcript the subject was conversing with a different interlocutor. The content of the transcripts was organized and numbered by conversation units or 'c-units'. A c-unit consists of an independent clause and its dependent clause modifiers. The independent clause does not need to be grammatically 'correct' to be a c-unit, but it does need to have independent 'meaning' within the discourse. Every independent

clause is a c-unit. No c-unit can contain more than one independent clause (Morgan, 1992).

The nine transcripts contained a total of 539 c-units spoken by the subject. Each of these c-units was analyzed to see if any of the 52 features of the TDS were present. The number of c-units analyzed is only included here to give the reader an idea of the size of the sample of the subject's speech that was analyzed, as no attempt was made to measure the frequency of the 52 features in this sample of the subject's speech. Only the feature's presence or absence on a 'plus/minus' basis was considered.

Results and Discussion

Table 2 shows the grammatical features that were present in the subject's speech with an example of each feature present taken from the subject's speech.

Table 2: Grammatical Features Present and Examples

STAGE	FEATURE	+/-	EXAMPLE
1:	Single Words	+	"Horse"
	Formulae	+	"I got it."
2:	II.-ing	+	"Uh, huh, kind of walking and no clothes on her shoulder."
	IRREG VERB	+	"Uh, so, uh, I found this."
	1st PN	+	"I think, I think so."
	2nd PN	+	"Are you describing now your card?"
	3rd PN	+	"And, uh, he looks very stupid."
	SVO	+	"He has white pants."

	SVO?	+	"You just have one horse?"
	'no'	+	"No"
	'no' + X	+	"Uh huh, kind of walking and no clothes on her shoulder."
	PP	+	"And under the knob, it has small circle."
3:	-ed	+	"Rotated? I don't know what rotating means."
	REG_PL	+	"Hat has stripes."
	IRREG_PL	-	
	POSSESS PN	+	"Her hairstyle is permanent."
	DO_FRONT	+	"Does look like W?"
	WHX FRONT	+	"And, what should I do now?"
	'don't' + V	+	"I don't understand."
	ADV	+	"Is it touch the line now?"
	'more'	+	"And, and the left side, the left side of the skirt...a little bit...more longer."
	TOPIC	+	"If you have just one, it's very easy."
	ADV FRONT	+	"Under the knob, it has small circle."
4:	AUX_EN	-	
	AUX_ING	+	"Are you describing now your card?"
	POSSESS	+	"The movie's name is Splash."
	PSEUDO INV	-	
	Y/N INV	+	"Are you describing now your card?"
	'better'	-	
	'best'	-	
	COMP_TO	-	
	PART_MOV	-	
	PREP STND	-	

5:	3SG_S	+	"He looks very stupid."
	PL_COND	+	"And under the circle, it has two long legs."
	CASE_3RD	-	
	REFLX ADV	-	
	AUX 2ND	+	"What should I do now?"
	SUPPLET NEG	-	
	DO_2ND	+	"...doesn't have person."
	-ly	+	"Actually, it doesn't need pencil."
	-er	+	"And the right one is longer than two stacks."
	-est	+	"And longest stack has one, two, three, four coils."
	DAT_TO	-	
	SUPPLET QUEST	-	
6:	GERUND	+	"I don't know what rotating means."
	REFLX_PN	-	
	Q_TAG	-	
	ADV_VP	+	"It also goes to two legs."
	DAT MVMT	-	
	CAUSATIVE	+	"O.K., let me have..."
	2SUBCOMP	-	

Table 2 shows one clear pattern. Ninety-six percent of the Stage 1, 2, and 3 features were present in the data, but the number of absent features increased dramatically beginning with Stage 4 and continued through Stage 6. Only 41% of the Stage 4, 5, and 6 features were present in the data.

This is an interesting pattern, but it is not support for the TDS or the MDM. It certainly does not mean that the subject is at Stage 3. The problem is that the developmental stages of the TDS are claimed to be 'implicational'. The presence of a feature in the data not only indicates that the feature has been acquired but also implies that features from all previous stages have been acquired. What is problematic then for the TDS and, therefore, for the MDM are 'gaps' in the implicational sequence.

Since the subject's speech contained features from Stage 6, the MDM and the TDS predicts that the subject has acquired features of previous stages and is at least ready to acquire the other Stage 6 features. Any features from Stages 1, 2, 3, 4, or 5 that are not present in the data are considered 'gaps'. These 'gaps' are problematic for the hypothesis. This point is illustrated more clearly by Table 3 which shows both the developmental sequences for each feature and the developmental stages that cut across all nine sequences. In Table 3, structures listed in brackets were absent from the data.

Table 3: Features Present and Absent in the Subject's Output (Note: bracketed features were absent)

STAGE	VERB	NOUN	PRONOUN	QUEST
1:		'WORDS' or 'FORMULAE'		
2:	IL-ing IRREG		1st 2nd 3rd	SVO?
3:	-ed	REG_PL (IRREG_PL)	POSSESS	DO_FRONT WHX_FRONT
4:	(AUX_EN) (AUX_ING)	POSESS		(PSEUDO_INV) Y/N_INV
5:	3SG_S	PL_COND	(CASE 3rd) (RFLX ADV)	AUX_2ND (SUPPLET)
6:	GERUND		(RFLX PN)	(Q_TAG)

STAGE	NEG	AD	ADJ	PREP	W_ORDER
1:		'WORDS' or 'FORMULAE'			
2:	no no + X			PP	SVO
3:	don't + V	ADV	more		TOPIC ADV_FRONT
4:			(better) (best)	(COMP_TO)	(PART_MOV) (PREP_STRD)
5:	DO_2ND (SUPPLET)	-ly	-er -est		(DAT_TO)
6:					ADV VP (DAT_MVMT) CAUSATIVE (2SUBCOMP)

A good example of the problem of 'gaps' for the hypothesis can be seen in the verb column.

The TDS hypothesis states that ESL learners will learn 'AUX_EN" and "AUX_ING" in Stage 4. If these structures are not present in the data, the hypothesis predicts that Stage 4 has not been reached and, therefore, that Stage 5 features should not be found in the subject's speech and Stage 6 features certainly should not be found in the subject's speech. Since Stage 5 and Stage 6 features are found, the hypothesis is not supported.

Conclusion

This study has serious shortcomings. It is the 'gaps' that are problematic for the hypothesis, and it is quite possible that these 'gaps' were the result of an insufficient sample of the learner's interlanguage. Perhaps the missing structures would show up in a larger sample of spontaneous speech or in elicited data, but all studies have methodological problems. If the methodological problems are ignored for a moment, what might the study mean?

As was previously mentioned, there are too many missing features in the implicational stages to consider this data as support for the TDS hypothesis and therefore for the MDM, but, again, one clear pattern did emerge in the data. The pattern showed some agreement with the TDS. Of the features in the first three stages of the TDS, 96% were found in the data, but, of the features in the last three stages only 41% were found. This finding is not surprising, since the sequences in the TDS look a lot like the syllabi of many ESL grammar texts.

For example, all of the features in the first three stages are also found in the first half of Robert Dixon's ESL grammar text Graded Exercises in English. All of the features in the last three stages of the TDS are found in the second half of Dixon's book. Graded Exercises in English was published in 1941!

In sum, this research suggests that there are at least very general DS/S, but that more research needs to be done. One way to proceed would be to do implicational analyses similar to the one presented in this paper, but these studies would need to be much more methodologically rigorous and of a much larger scale. Although no large scale studies of this type have been done, the methodology has been thought out (Hatch & Farhady, 1982).

To be useful, this research would need to look at many more features than the TDS contains. It would need to look at many learners of various ability and L1 background, and it would need to examine large samples of spontaneous learner output in many contexts as well as large amounts of elicited data.

Of course, this type of research would be extremely time consuming and therefore extremely expensive, but it seems like the kind of research that would be very helpful in addressing the issues of DS/S and ILV.

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